# Major Cold and Wet Spring Event: Potential Impacts in the North Central U.S. April 27-May 9, 2017

Updated April 27, 2017
National Weather Service Omaha/Valley, NE

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# Key Points

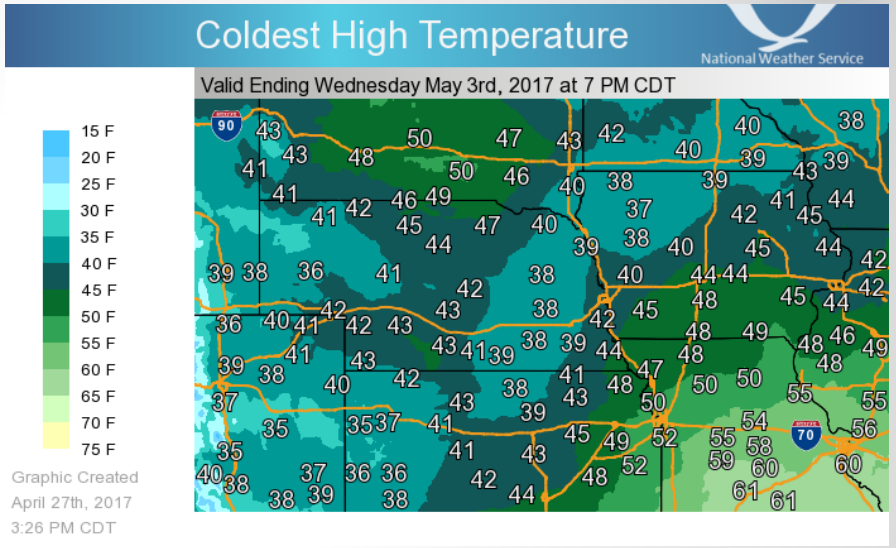
- Freezing/near freezing temperatures in some freeze-sensitive areas through the next 2 weeks
  - Impacts: Freeze-sensitive agriculture, horticulture, landscaping, and gardening
- Chilly air temperatures and rain and/or snow, with cool soil temperatures
  - Impacts: Planting operations, livestock

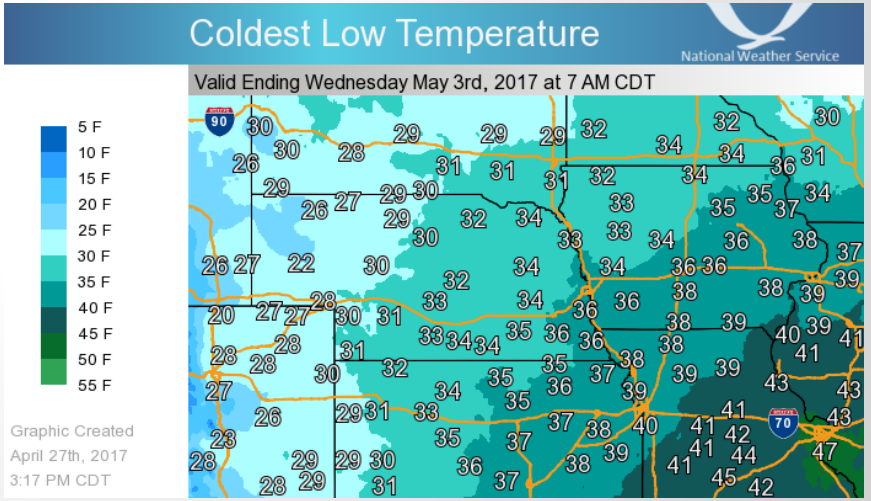
# Temperatures: April 27-May 2

- *Top right*: Coldest high temperatures on any day between April 28 and May 3
- *Bottom right*: Coldest low temperatures on any day between April 28 and May 3

- **Freezing temperatures** possible from the central and northern Plains to the Great Lakes
- **Much below-normal high of 69 and normal low around 45** possible across the area
- Conditions may occur on **several days** through the period

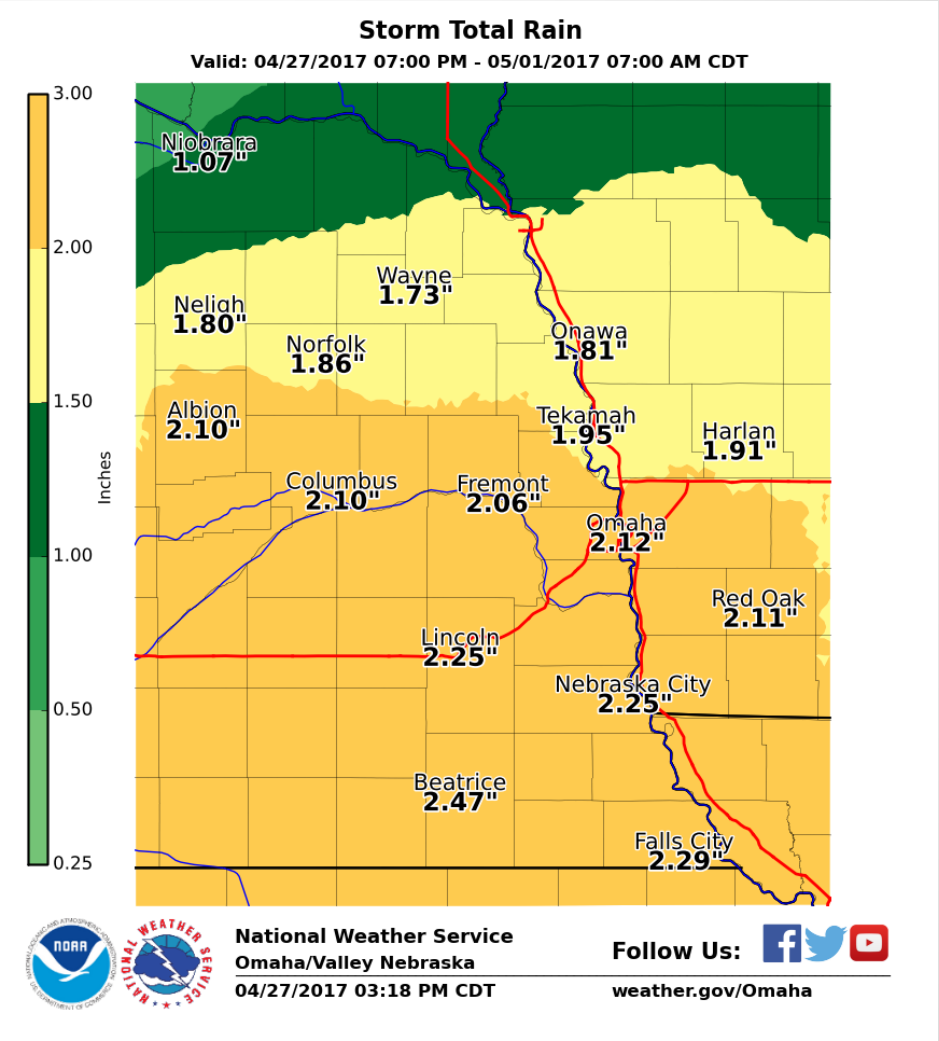
- For local weather updates now through 7 days: http://www.weather.gov/



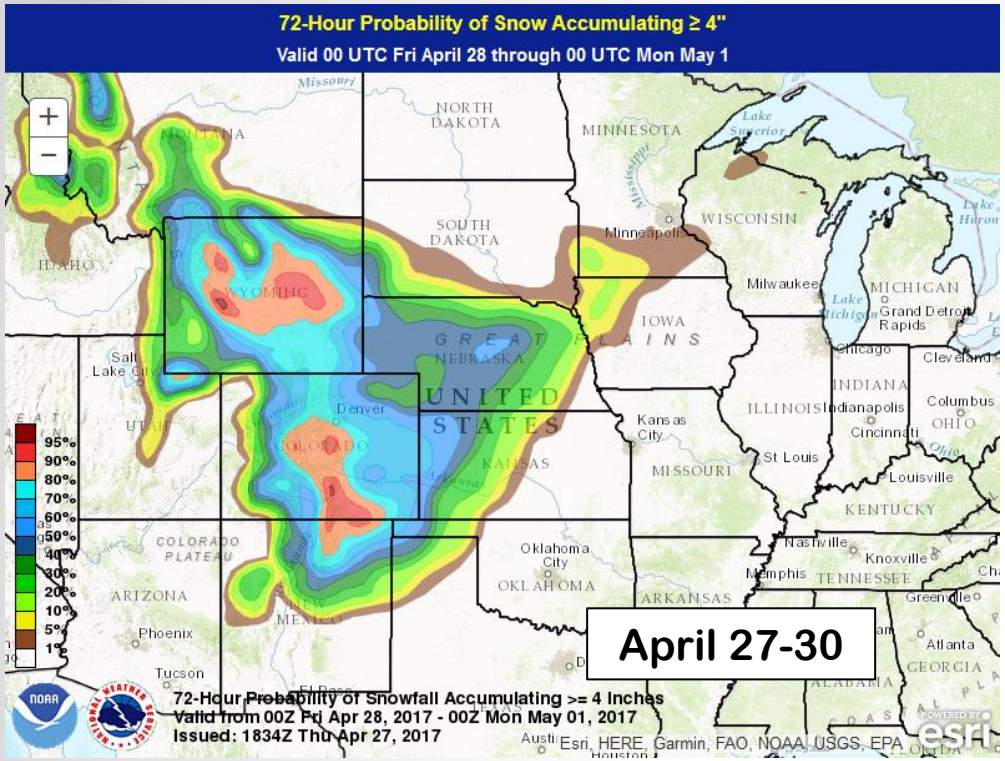



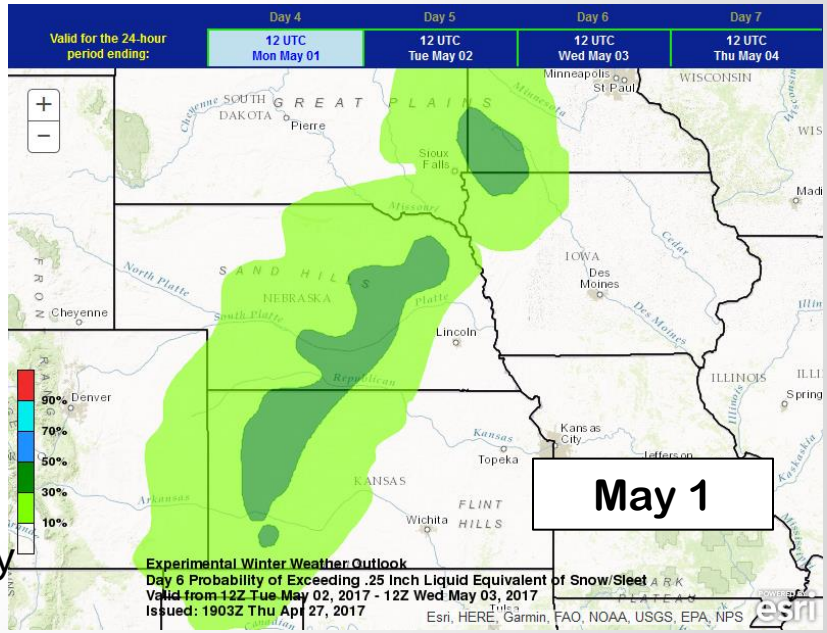
# Precipitation: April 27-May 1

- Image: Total forecasted precipitation through 7am 5/1 (actual precipitation often is more spotty or varied in coverage)
- **Unusually wet** conditions likely for much of the central U.S. for April 27-May 3
- Combined with cool temperatures



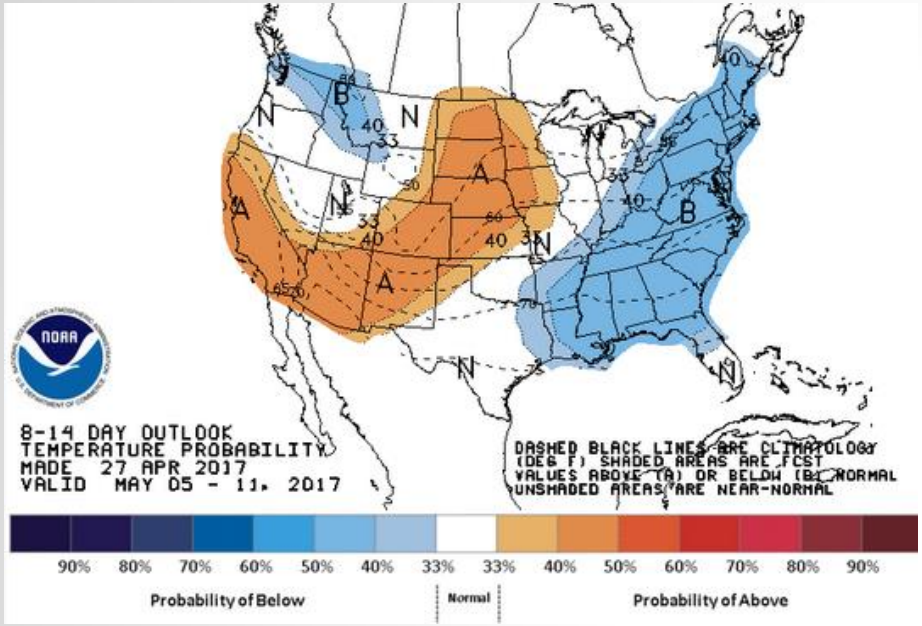
# Snowfall: April 26-May 2

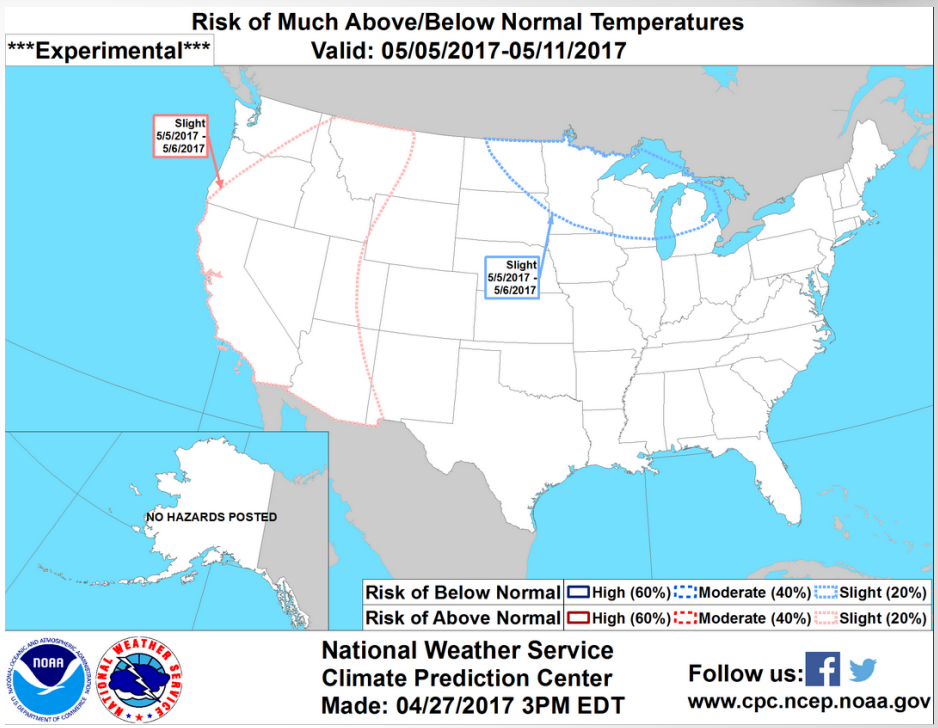



- *Top left*: Chance of snow >4" total for April 27-30
- *Right*: Chance of snow >0.25" liquid equivalent for May 1
- **Significant snowfall possible** in Wyoming, Colorado

# 8- to 14-Day Temperature Outlook: May 5-11, 2017

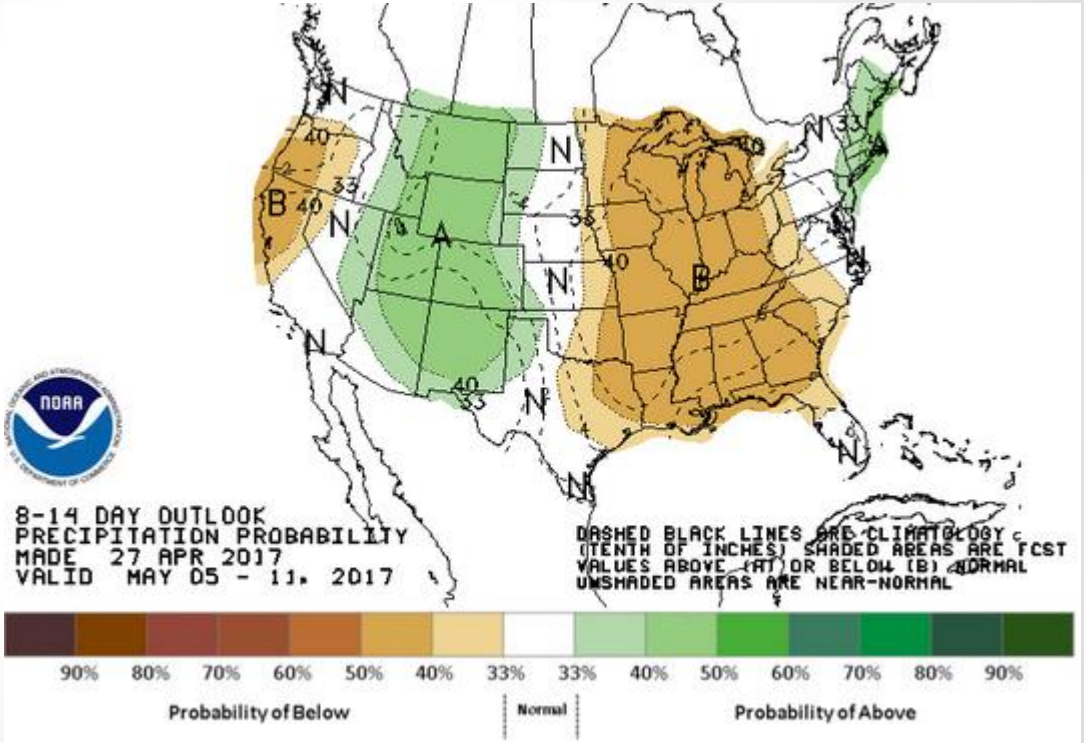



- Odds favor above-normal temperatures for Nebraska and western Iowa

# 8- to 14-Day Precipitation Outlook: May 5-11, 2017

- Odds favor near to below normal precipitation for eastern Nebraska and western Iowa



# Impacts

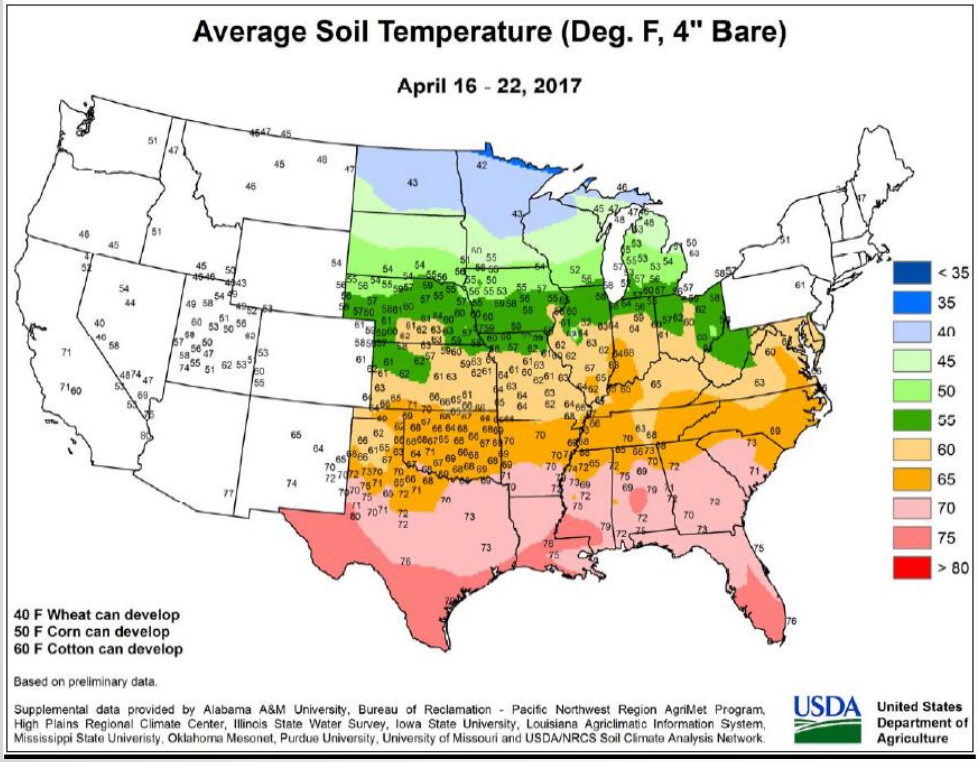

## Freeze:

- Wheat growth
- Apple and other fruit tree blooms
- Home gardens and landscaping

## Cold and Rain:

- Corn planting and seed germination
- Livestock health, especially calves
- Soil compaction and nutrient loss
- Inaccessible fields

# Impacts - Soils

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## Temperature:

- Continuous cold, wet soil and cloud cover will keep soils very cool

## Moisture:

- Flooded fields/slow field access
- Contribute to nutrient loss
- Increased crop disease issues
- Impact root growth

## Risk:

- Likely delay additional planting
- Heaviest rain expected southern/eastern Corn Belt
- Most plains and Midwest will likely have some wetness

# Impacts - Crops

http://crops.extension.iastate.edu/cropnews/2012/05/imbibitional-chilling-and-variable-emergence

## Freezing conditions:

- Wheat, horticultural, fruits, perennials most at risk based on development (different risk temperature at different stages: fruits, wheat)
- Freeze risk management very likely
- Exposed home vegetation need to monitor forecasts

## Cold conditions:

- Most field crops less risk of freeze, more risk sitting in cold soils
- Slow crop development
- Increased disease risk
- Replant may be necessary

# Impacts - Livestock

## Cold, Rain, Winds:

- Young livestock should be monitored because of prolonged cold/wet conditions over the 1-2 weeks
- Snow accumulations could add to risk in Plains, northern states